

## IN THE CLAIMS

1. (currently amended) A method for providing an internet protocol (IP) address of at least one remote management processor to a management server, the method comprising:

configuring an IP address issuing computer to include a plurality of IP addresses that are available and authorized to be assigned to at least one remote management processor which is coupled to a remote hardware server to perform management functions thereon, and to include Option data associated with the at least one remote management processor, such that the Option data comprises an IP address of the management server which is configured to communicate via a network with the at least one remote management processor to access information about hardware resources disposed within the remote hardware server coupled to the at least one remote management processor;

sending a request from the at least one remote management processor to the IP address issuing computer for an IP address to be assigned to the at least one remote management processor;

in response to the request, receiving from the IP issuing computer, at the at least one remote management processor, an acknowledgement packet which includes the requested IP address assigned to the at least one remote management processor and the Option data;

in response to receiving the acknowledgment packet, executing a local code in the at least one remote management processor such that the local code searches the acknowledgement packet to detect the Option data, and storing in the remote management processor, as a destination address for sending an alert packet, the received IP address of the management server included in the Option data; and

in response to the detecting of the Option data, automatically sending the alert packet to the destination address by the at least one remote management processor, such that the alert packet ~~includes~~ comprises the received requested IP address of the at least one remote management processor, and wherein the alert packet further comprises a shelf life of the received requested IP address.

2. (previously presented) The method of claim 1, further comprising:

in response to receiving the alert packet at the destination address, the management server stores information included in the alert packet, which information includes the IP address

assigned to the at least one remote management processor and a shelf life of the assigned IP address.

3. (previously presented) The method of claim 2, wherein the IP address issuing computer is a Dynamic Host Configuration Protocol (DHCP) server, wherein a configuration file in the DHCP server identifies the plurality of IP addresses that are available and authorized to be assigned to the at least one remote management processor; and wherein the management server is running a management server software package to manage the at least one remote management processor.

4. (cancelled)

5. (previously presented) The method of claim 3, wherein the sending of the request from the at least one remote management processor to the IP address issuing computer for an address for the at least one remote management processor is automatically prompted by the at least one remote management processor being powered on.

6. (previously presented) The method of claim 3, wherein an administrator of the management server defines the Option data configured in the IP address issuing computer.

7. (currently amended). A system for providing an internet protocol (IP) address of at least one remote management processor to a management server, the system comprising:

- a management server;

- at least one remote management processor configured to be connected to the management servers through a network, wherein the at least one remote management processor is coupled to a remote hardware server to perform management functions thereon, and wherein the management server is configured to communicate via the network with the at least one remote management processor to access information about hardware resources disposed within the remote hardware server coupled to the at least one remote management processor;

- an IP address issuing computer connected to the at least one remote management processor through the network, wherein

the IP address issuing computer is configured to include a plurality of IP addresses that are available and authorized to be assigned to the at least one remote management processor, and to include Option data which is associated with the at least one remote management processor and includes an IP address of the management server;

the at least one remote management processor sends a request to the IP address issuing computer for an IP address to be assigned to the at least one management processor;

the IP address issuing computer assigns an IP address to the at least one remote management processor in response to the request and sends an acknowledgment packet to the at least one remote management processor which includes the assigned IP address and the Option data;

the at least one remote management processor receives the acknowledgement packet;

a local code in the at least one remote management processor searches the acknowledgement packet to detect the Option data and stores in the at least one remote management processor, as a destination address for sending an alert packet, the received IP address of the management server included in the Option data, and a shelf life of the received IP address; and

in response to the detecting of the Option data, automatically sending the alert packet to the destination address by the at least one remote management processor to enable the communication between the management server and the at least one management processor via the network.

8. (previously presented) The system of claim 7, further comprising:

in response to receiving the alert packet at the destination address, the management server stores information included in the alert packet, which information includes the IP address assigned to the at least one remote management processor and a shelf life of the assigned IP address.

9. (previously presented) The system of claim 8, wherein the IP address issuing computer is a Dynamic Host Configuration Protocol (DHCP) server, wherein a configuration file in the DHCP server identifies the plurality of IP addresses that are available and authorized to be assigned to the at least one remote management processor; and wherein the management server

is running a management server software package to manage the at least one remote management processor.

10. (cancelled)

11. (previously presented) The system of claim 9, wherein the sending of the request from the at least one remote management processor to the IP address issuing computer for an IP address for the at least one remote management processor is prompted by the at least one remote management processor being powered on.

12. (currently amended) A computer program product, residing on a computer storage medium, for providing an internet protocol (IP) address of at least one remote management processor to a management server, the computer program product including program code that when executed by a computer includes functionality comprising:

configuring an IP address issuing computer to include a plurality of IP addresses that are available and authorized to be assigned to at least one remote management processor which is coupled to a remote hardware server to perform management functions thereon, and to include Option data associated with the at least one remote management processor, such that the Option data comprises an IP address of a management server which is configured to communicate via a network with the at least one remote management processor to access information about hardware resources disposed within the remote hardware server coupled to the at least one remote management processor;

sending a request from the at least one remote management processor to the IP address issuing computer for an IP address to be assigned to the at least one remote management processor;

in response to the request, receiving from the IP issuing computer, at the at least one remote management processor, an acknowledgement packet which includes the requested IP address assigned to the at least one remote management processor and the Option data;

in response to receiving the acknowledgement packet, executing a local code in the at least one remote management processor such that the local code searches the acknowledgement packet to detect the Option data, and storing in the remote management processor, as a

destination address for sending an alert packet, the received IP address of the management server included in the Option data; and

in response to the detecting of the Option data, automatically sending the alert packet to the destination address by the at least one remote management processor, such that the alert packet includes comprises the received requested IP address of the at least one remote management processor, and wherein the alert packet further comprises a shelf life of the received requested IP address.

13. (previously presented) The computer program product of claim 12, further comprising:

in response to receiving the alert packet at the destination address, the management server stores information included in the alert packet, which information includes the IP address assigned to the at least one remote management processor and a shelf life of the assigned IP address.

14. (previously presented) The computer program product of claim 13, wherein the IP address issuing computer is a Dynamic Host Configuration Protocol (DHCP) server, wherein a configuration file in the DHCP server identifies the plurality of IP addresses that are available and authorized to be assigned to the at least one remote management processor; and wherein the management server is running a management server software package to manage the at least one remote management processor.

15. (cancelled)

16. (previously presented) The computer program product of claim 14, wherein the sending of the request, from the at least one remote management processor to the IP address issuing computer for an address for the at least one remote management processor is automatically prompted by the at least one remote management processor being powered on.

17-21. (cancelled)

22. (new) A computer-implemented method of enabling a notification to a management server that a client has received an internet protocol (IP) address from a dynamic host control protocol (DHCP) server, the method comprising:

a DHCP server receiving a request for an IP address from a client; and

in response to receiving the request, the DHCP server transmitting a requested client IP address, a shelf life of the requested client IP address, and a management server address to the client, wherein the management server address is an IP address of a management server that monitors operations of the client, and wherein the management server address enables the client to transmit the requested client IP address and the shelf life of the requested client IP address to the management server.

23. (new) The method of claim 1, further comprising:

the management server setting up the DHCP server by identifying which IP addresses the DHCP server is authorized to assign.

24. (new) The method of claim 1, wherein the alert packet is transmitted from said at least one remote processor without said at least one remote processor's use of an operating system.